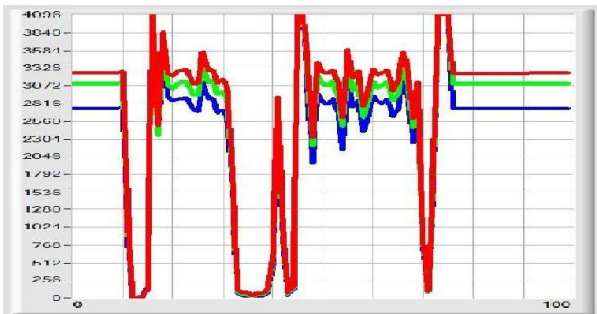




1. Color differentiation of plastic bottles

During the recycling process different colored PET-bottles should be separated. Even light blue colored plastic bottles must be differentiated from clear transparent PET-bottles. At this the speed of the bottles is a few m/s. There can be condense water accumulated in the bottles, which causes water drops inside the bottles. Furthermore the bottles come with a label. For this purpose a color sensor type **SPECTRO-3-FIO-JR** in connection with an optical through beam fiber type **D-S-A3.0-(3.0)-1200-67°** and an optical frontend type **KL-M12-XL-A3.0** (at the transmitter side) and **KL-M18-A3.0** (at the receiver side) is used. The distance of the frontends to the plastic bottles is around 50 mm. With an external trigger sensor the EXT3 trigger mode can be used or even the SELF trigger mode is a good solution. As shown in the screenshots the light blue, light green, light brown and the clear bottles can be proper separated.



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